4.0 ENVIRONMENTAL CONSEQUENCES

This chapter addresses the direct, indirect and cumulative impacts on elements of the human environment from actions proposed in the CDCA Plan Amendment. This chapter is organized by environmental element, followed by a description and comparison of impacts from the relevant plan element alternatives.

Land use plans, such as the CDCA Plan Amendment, developed in accordance with Title 43 Code of Federal Regulations, provide landscape level decisions for managing the BLM-administered public lands. As a result, the impact analysis for land use plans level actions tends to be cumulative by nature.

4.15 Socio-Economic Considerations

Wild and Scenic River Eligibility Recommendations. Proposed Plan (Alternatives A, B and C). The Proposed Plan would apply only to BLM-managed lands already under conservation management. If these rivers are later studied for suitability status, the potential socio-economic impacts of their designation as Wild and Scenic Rivers would then be assessed. At this time, potentially positive effects would be the provision of additional management mechanisms to maintain free-flowing conditions, protection against potentially degrading effects of OHV use, protection of water quality and indirect protection of associated ground water. Protection would also enhance opportunities for passive enjoyment of associated wetlands and riparian habitat and wildlife, and associated opportunities for ecotourism. Potentially adverse impacts appear to be limited to restrictions on OHV access and associated support businesses.

No Action Alternative (D). No socio-economic impacts are foreseen from deferral of eligibility determinations.

Visual Resource Management. Proposed Plan (Alternatives A, B and C) and No Action (D). The high value of the visual resources in the planning area constitute a significant economic resource that has helped to induce and supports and a thriving tourism and second home economy, as well as being an important contributor to the overall quality of life in the planning area. Therefore, the resource assessment and protection afforded by the Proposed Plan will serve to strengthen and secure this important economic asset for the long-term. It is anticipated that the same protection would be afforded under the No Action Alternative upon assignment of interim VRM classifications on a case-by-case basis when projects are proposed on public lands.

Conversely, proposed uses within BLM-managed lands within the CDCA planning area will be assessed for their potential to adversely impact the area's important visual resources. Proposed uses may be required to implement project design or mitigation measures which reduce impacts to visual and scenic resources to insignificant levels, which may result in additional costs to such land uses. While design solutions to

impacts may be cost-effective, it is still likely that some economic effect, i.e. additional land use costs would be associated with mitigation.

Land Health Standards and Air Quality. Proposed Plan (Alternatives A, B and C) and No Action (D). The adoption of land health standards and air quality management strategy would apply to all BLM lands and programs, and would provide important baseline protections for land health areas of concern, including soils, native species, riparian/ wetlands/ stream functions, water quality and air quality. There are clear, although unquantified, positive relationships between the protection of land health, including water and air quality, and the economic health of a region. Land health standards and implementation of an air quality management strategy are recognized in the CDCA planning area as essential to the overall economic health of the resort, vacation and retirement economy of the region. Protection of land health through the implementation of the Proposed Plan will have positive long-term economic impacts.

The application of the proposed land health standards and air quality management strategy would affect the economic costs and performance of certain land uses. Depending upon the type of use proposed, terms and conditions and mitigation measures associated with the issuance of permits, rights-of-way, leases and other use authorizations would result in varying additional costs to implement the proposed use. Mitigation cost controls can be achieved through thoughtful project design, phased mitigation implementation and by other means.

Absent a Bureau-initiated air quality management strategy (No Action Alternative), projects on BLM-lands would still be required to comply with National Ambient Air Quality Standard for PM10; however, a greater economic burden would be placed on private interests to attain the PM10 standard valley wide.

Multiple-Use Classification. Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). The modification of Multiple-Use Classes or retention of existing designations, in and of themselves, would have little socio-economic impact. Although Multiple-Use Classes provide broad guidance with respect to permitted uses of the public lands, current laws and regulations and other actions proposed through this Plan have a greater effect on sociological and economic factors within the planning area. Socio-economic impacts from such actions are addressed under the appropriate headings.

Habitat Conservation Objectives. Proposed Plan (Alternatives B and C). The Proposed Plan addresses the habitat conservation objectives for six general habitat types with varying needs and opportunities for compatible use. It does not adversely affect existing energy and mineral development uses, would have a limited adverse impact on routes of travel and associated economic activity, and would have a substantial effect in limiting future land uses. The amendment would allow the retrofitting of existing windparks to increase the cost-effective generation of power on reduced disturbed areas. Development of new windparks is not precluded under the Proposed Plan but would restrict the extent of site disturbance that would be permitted.

Wind energy development would be limited to existing permitted rights-of-way. However, current technology being applied to existing wind resource areas constitutes approximately 215 megawatts (Mwe) of installed capacity, with approximately 30 percent of existing wind turbines are small (65 kilowatt (Kwe)). The potential for the smaller and mid-range size turbines to be replaced by larger turbines (up to 1.5 Mwe) represents an opportunity for continued growth in windpark energy extraction on currently developed lands. Approximately 285 acres of available windpark land has not yet been developed. To the extent that harvestable wind resources are geographically limited and already well developed, the Proposed Plan would appear to have less than significant impacts on the economics of wind energy development on BLM lands.

Supplies of sand and gravel in the planning area are expected to remain adequate for a period of 40 years or more (Granite Construction EIR, 2002), and extensive areas of viable sand and gravel resources not yet developed are affected by neither the CDCA Plan amendment nor the Coachella Valley Multiple Species Habitat Conservation Plan.

Alternative A and No Action (D). These alternatives would continue the requirement that all state and federal listed species and their critical habitat be fully protected, and projects with potential impacts would require consultation with the U.S. Fish and Wildlife Service under Section 7 of the federal Endangered Species Act. Unlike Alternatives B and C, other sensitive but unlisted species may not receive the same level of protection under the subject alternatives. Assessments of impacts and requirements for mitigation would be determined on a case by case basis. This approach would leave a higher level of uncertainty regarding viable uses and at least on this basis appear to be inferior to the Proposed Plan. Socio-economic impacts from the continuing listing of species could further socio-economic impacts from the implementation of these alternatives.

Fire Management. Proposed Plan (Alternatives B and C). The application of the fire management categories under the Proposed Plan is designed to be responsive to ecological, social and legal issues associated with fire suppression and management. To the extent that these management categories attempt to balance the various issues, including direct and indirect economic costs associated with fire management, the Proposed Plan will have neutral to positive economic effects. Ecological considerations dictate the implementation of suppression strategies in desert floor and wash and uplands habitats where fire does not play a meaningful natural role in succession and regeneration. However, these areas seldom burn to low fuel densities and their priority for fire suppression should not result in significant adverse economic impacts.

Fire management, including the use of prescribed burns, will play an important role in protecting the health of montane and chaparral habitats. To the extent fire management is tied to the goals and objectives of the Coachella Valley Multiple Species Habitat Conservation Plan, fire management will also enhance land health status, protect visual and scenic resources, and contribute positively to the overall economic health of the region.

Alternative A and No Action (D). Under these alternatives, no habitats would be categorized for specific fire management strategies, although specific fire management plans would continue to be in effect. These include fire suppression strategies such as the use of motorized vehicles, aircraft, and fire retardant chemicals. Although the management regimes set forth in the Proposed Plan are defined by habitat types, these same judgments may be applied to fire suppression strategies under the current CDCA Plan, as amended. Therefore, the socio-economic effects associated with these alternatives are expected to be comparable to those associated with the Proposed Plan.

Special Area Designations. Proposed Plan (Alternative A). The Proposed Plan would designate lands outside ACECs, wilderness areas, Santa Rosa and San Jacinto Mountains National Monument, and freeway interchanges in the NECO Plan overlap area as the Coachella Valley Wildlife Habitat Management Area (WHMA). This alternative does not increase ACEC lands and the acreage designated as wilderness and National Monument remains the same under all four alternatives. This alternative does place approximately 40,541 acres of public lands in the Coachella Valley WHMA, which is an administrative designation requiring special management attention for the protection of important wildlife resources. Economic use of WHMA lands can be permitted so long as proposed uses demonstrate management strategies and mitigation measures that reduce potential impacts to sensitive biological and cultural resources below levels of significance. Economic impacts associated with the implementation of the Proposed Plan would therefore be less than significant.

Alternative B. This alternative would involve the expansion of one existing ACEC (Dos Palmas) and the creation of one new ACEC in the Mission Creek area. Both actions would not preclude the development of managed access programs consistent with the current version of the Coachella Valley MSHCP (CVMSHCP). This alternative could further the long-term protection of valuable and finite natural resource areas with high biological, visual/scenic and other values marketable to the growing eco/nature tourism industry. Controlled access would be needed to protect the value of these resources. The balance of planning area lands outside designated wilderness areas and the Santa Rosa and San Jacinto Mountains National Monument would be designated as the Coachella Valley Wildlife Habitat Management Area (WHMA). As with other lands within the CVMSHCP, controlled access could be made available with positive long-term economic effects.

Alternative C. Alternative C would result in the designation of an additional 40,541 acres of public lands as Areas of Critical Environmental Concern (ACECs), and would provide greater limits on potential uses in favor of increased protection of identified resources or values. Resources to be protected and potential uses that may be permitted will vary from ACEC to ACEC or resources to be protected therein. As CVMSHCP conservation areas generally envelop ACECs under this alternative, saleable mineral material extraction and new communications sites and windparks would therein be prohibited. Economic impacts associated with the implementation of this alternative would therefore be greater than under the other alternatives.

<u>No Action Alternative (D)</u>. Maintenance of the status quo as set forth in the current CDCA Plan would not change conditions or regulations that guide, manage or affect the socio-economic use of these lands. Therefore, there would be no significant impact to socio-economic resources.

Land Tenure: Exchange and Sale Criteria. Proposed Plan (Alternatives B and C). No impacts to existing designations or land uses would occur as a result of adopting land exchange and sale criteria. The criteria were designed to ensure any exchanges or sales were compatible with designated conservation areas.

Future land uses would be impacted as a result of adopting land exchange and sale criteria. The land exchange criteria would severely limit exchange opportunities on public lands within the conservation areas, wilderness or existing ACECs, allowing consideration of only those proposals where the land use proposed by an exchange proponent could be demonstrated to be (1) advantageous to conservation goals and (2) economically viable based on allowable land uses and appraised values.

Public lands outside the conservation areas, wilderness or ACECs would be more available for exchange. However, exchange proposals would be required to ensure public needs for community resources (e.g., recreation access, sand and gravel supplies, communications facilities) could continue to be met.

The overall result would be to (1) limit conversion of current public lands to land uses other than conservation, (2) use land exchanges as a mechanism to assemble conservation reserves, and (3) reduce public costs of assembling reserve areas through use of land exchanges where opportunities might be presented.

<u>Alternative A and No Action (D)</u>. If these criteria were not adopted, land exchanges and sales would be assessed on a case-by-case basis, taking into consideration sensitive resources, but not required to benefit the CVMSHCP conservation system.

Land Tenure: Acquisition Criteria. Proposed Plan (Alternatives B and C). Under the Proposed Plan, BLM would undertake efforts and assume costs to acquire additional lands important to the creation of viable contiguous holdings of conservation lands, which would further the goals of the Coachella Valley MSHCP (CVMSHCP). BLM lands identified as appropriate for exchange or sale could be used to balance or more than offset the costs of acquiring conservation lands. The Proposed Plan establishes criteria by which the acquisition of conservation lands would be considered appropriate. These include acquisition from willing sellers, direct benefits to the CVMSHCP and indirect benefits through the diversion of potentially adverse land uses away from conservation lands, enhanced biotic and abiotic components of conservation areas, and coordination with local jurisdictions. Acquisition determinations would be made on a case-by-case basis. Based upon the current type and extent of proposed conservation lands as set forth in the Draft CVMSHCP, substantial opportunities could remain available for BLM to acquire important conservation lands and cover costs from appropriate land exchanges or sales, which would also benefit overall conservation efforts.

<u>Alternative A and No Action (D)</u>. If these criteria were not adopted, land acquisitions would be assessed on a case-by-case basis, taking into consideration sensitive resources, but not required to benefit the CVMSHCP conservation system.

Management of Acquired Lands. Proposed Plan (Alternatives A, B and C). The Proposed Plan would reduce, if not eliminate planning and administrative costs associated with developing separate land management plans for newly acquired lands. Where newly acquired land becomes part of an ACEC or similarly designated area, public access and development opportunities would be restricted to those permitted within the ACEC and other conservation areas, as set forth in the applicable management plan. The Proposed Plan could further the long-term protection of valuable and finite natural resource areas with high biological, visual/scenic and other values marketable to the growing eco/nature tourism industry, thereby resulting in positive long-term economic effects.

No Action Alternative (D). If no guidance for managing acquired lands was provided at this time, acquired and formerly withdrawn lands are subject to applicable land and minerals laws when an opening order is issued and published in the Federal Register. The primary impact of this action would be to reduce future public planning costs, although it would limit opportunity to manage a parcel differently without a plan amendment.

Communication Sites and Utilities. Proposed Plan (Alternative B). The Proposed Plan would restrict windpark and communication site development to designated areas. to be managed in accordance with habitat conservation objectives and land health standards. It would not significantly affect the economics of wind energy development on BLM lands. The best available lands for harvesting wind in the Coachella Valley are already under production and are included in the proposed areas for designation. Wind energy resource areas are geographically limited and many are already developed, leaving few viable opportunities for future windpark development, regardless of the proposed action. Also, current wind energy technologies have increased the efficiency of wind turbines so that fewer turbines (and less acreage) are needed to achieve high energy output. The economic effects of the proposed amendment on communication site development would be neutral in the near to mid-term. In the long term, satellite technologies will become more the norm, reducing the need for additional communications sites. By restricting high-profile windpark and communication site development to designated areas, the proposed action could further the long-term protection of natural resource areas with high biological, visual/scenic, and other values marketable to the growing eco-tourism industry.

<u>Alternative A</u>. The socio-economic impacts associated with communication sites, windfarms and utilities through the implementation of this alternative would conceivably be the least of the four alternatives. Proposals for new or renewed sites, corridors and access would be considered on a case-by-case basis throughout conservation areas

and would be possible if management strategies and mitigation measures were adequate to protect sensitive biological and other resources.

<u>Alternative C</u>. The implementation of this alternative for communication sites and windfarms would be the most restrictive and would have the greatest adverse potential socio-economic impacts. No new communication sites, windfarms, or ancillary disturbances or uses would be permitted within designated conservation areas. Renewals would only be considered on a case-by-case basis, and could be disruptive to assured continuation of operations. Utility facilities, corridors or access roads within conservation areas could be permitted if design solutions, management strategies and mitigation measures avoided significant impacts t sensitive biological or cultural resources.

No Action Alternative (D). This alternative would maintain the status quo, with renewals of existing leases and uses, as well as consideration of new uses to be considered on the basis of available lands and completion of appropriate environmental review. No change in socio-economic conditions or impacts would result.

Sand and Gravel Mining. Proposed Plan (Alternative B). The potential economic effect of this action would be multifold. First, it would limit mineral extraction to existing mining areas, which are proposed to include active mineral extraction sites, as well as sites designated by the California Division of Mines and Geology as quantified, cost-effectively extractable mineral resource zones (MRZs). The Proposed Plan would not affect private lands outside the conservation areas established by the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) with extractable resources. Economic effects would be neutral in the near to mid-term, but could be adverse in the long-term as readily available resources are exhausted. The long-term impact horizon is probably 50 years or more (Granite Indio Quarry SEIR, 2002).

However, as sand and gravel resources are exhausted over the long-term and fewer mining opportunities are available, the economic effects of the Proposed Plan could be adverse. The application of site-specific mitigation measures would result in varying additional costs to the permittee or lessee, but these costs can be controlled through thoughtful project design and phased mitigation implementation. Nonetheless, the restriction of sand and gravel mining operations within CVMSHCP conservation areas would protect the biological, ecological, visual and other values of these sensitive areas, thereby contributing positively to their overall economic health.

Alternative A. Sand and gravel mining would be allowed within CVMSHCP conservation areas and outside ACECs so long a habitat conservation objectives could be met through the application of appropriate and effective management strategies and mitigation measures. It is also presumed that other required environmental performance criteria could be met. This alternative provides the greatest opportunity for sand and gravel extraction and therefore would have potentially the greatest positive socio-economic effect. It should be noted that the fewer possible restrictions on sand and gravel mining operations within CVMSHCP conservation areas, while still protecting

the biological and ecological resources of the area, might adversely impact visual and other values of these sensitive areas, thereby contributing negatively to their overall economic health. Presumably such impacts could also be mitigated to levels of insignificance.

<u>Alternative C</u>. Clearly, this alternative has the potential for the most adverse impacts to socio-economic resources. It presumes the continuation of existing leases and sand and gravel operations, but would preclude the BLM from allowing the development of any new sand and gravel mining within the CVMSHCP conservation areas. Economic effects would be limited over the near to mid-term, given that accessible supplies of sand and gravel in the planning area are expected to remain adequate for a period of 40 years or more (Granite Construction EIR, 2002). However, as sand and gravel resources are exhausted over the long-term and fewer mining opportunities are available, the economic effects of this alternative could be adverse.

No Action Alternative (D). This alternative is essentially the maintenance of the status quo, where new requests for permits and leases to conduct sand and gravel mining would be considered on a case by case basis. There would be no change in socioeconomic impacts from the maintenance of this management strategy.

Livestock Grazing. Proposed Plan (Alternative A). The Proposed Plan would not result in any changes to existing livestock grazing opportunities in the planning area, and therefore, would not have any economic implications.

Alternative B. This alternative would involve the retirement of that portion of the Whitewater Canyon Allotment located north of the San Bernardino/Riverside County line, and the adjustment of use and grazing capacity in the CDCA planning area accordingly. The subject allotment is currently leased but is not being used for grazing. Retirement of the subject portion of allotment would have a limited impact on BLM revenues and no economic impact on grazing and associated economic benefits.

<u>Alternative C</u>. Implementation of this alternative would result in the retirement of the entire Whitewater Canyon Allotment. The subject allotment is currently leased but is not being used for grazing. Elimination of the entire allotment would have a limited impact on BLM revenues and no economic impact on grazing and associated economic benefits.

<u>No Action Alternative (D)</u>. The status quo would be maintained on the Whitewater Canyon Allotment and no change in socio-economic impacts would result from this alternative.

Wild Horse and Burro Program. Proposed Plan (Alternative B). The Proposed Plan would involve the transfer of BLM parcels within the Palm Canyon Herd Management Area (HMA) to the Agua Caliente Band of Cahuilla Indians (ACBCI) via land exchange, and amendment of the existing MOU for BLM to provide management assistance for horses on tribal lands. Although the BLM would lose the existing value of Palm Canyon

HMA lands, the proposed land exchange would provide BLM with an opportunity to acquire important conservation lands or other lands suitable for multiple use purposes. Depending on the location and suitability of these newly acquired lands, economic benefits could be realized from development leases, right-of-way permits, or similar land use mechanisms. However, BLM would incur costs associated with management of newly acquired lands.

The ACBCI would gain additional acreage in the Santa Rosa and San Jacinto Mountains National Monument and would incur additional costs associated with management of these lands. The Tribe would lose acreage elsewhere as a result of the land exchange, as well as any potential economic benefits associated with them, such as future development-related income. The BLM and ACBCI would work closely with one another to facilitate a land exchange that is mutually agreeable.

<u>Proposed Plan (Alternative B) and Alternative C</u>. Deletion of the Palm Canyon and Morongo HMAs would eliminate BLM's herd management costs for these areas, including provisions for feed, cover, and water requirements, herd surveillance and monitoring, and necessitate the removal of animals from the previously designated areas.

<u>Alternative A and No Action (D)</u>. Retention of the Palm Canyon and Morongo HMAs would continue BLM's herd management costs for these areas, including provisions for feed, cover, and water requirements, herd surveillance and monitoring, and the removal of excess animals from designated areas.

Motorized Vehicle Area Designations. Proposed Plan (Alternative B), Alternatives A and C. The designation of public lands as either open, limited, or closed to off-road vehicles would be based on the protection of public land resources, the minimization of land use conflicts, and the minimization of damage to natural resources and wildlife habitats. Economic effects would be indirect, yet positive. "Open" and "limited" motor vehicle areas would provide casual OHV users with access to dedicated OHV activity areas and a network of motorized-vehicle routes, and authorized users with access to rights-of-way or developed utility sites. This type of access would facilitate and indirectly promote the use of public lands for multiple use purposes, such as utility development or mining, as well as recreation and ecotourism. Surrounding land uses would be considered in the designation process to assure that potential land use conflicts, such as increased noise and fugitive dust from OHV use, would not adversely impact the value of adjacent lands. Limiting vehicular access to approved routes would control public access thereby helping to preserve the important ecological, biological, visual/scenic and other values of these areas, and contributing positively to the overall economic health of the region.

No Action Alternative (D). Impacts would be the same as described above, except that use of existing routes and informally-established OHV "free-play" areas would not be changed from current management.

Motorized Vehicle Route Designations. Proposed Plan (Alternative B), Alternatives A and C. Like the motor vehicle area designations described above, the designation of "open," "limited" or "closed" motor vehicle routes would have indirect, but positive economic effects. "Open" and "limited" routes would provide both casual and authorized users with direct access to BLM-managed lands, thereby facilitating and promoting the use of public lands for multiple use purposes, including recreation and ecotourism. Land use compatibility issues would be evaluated in the route designation process to assure that land use conflicts, such as increased fugitive dust and noise from motor vehicles, are minimized and do not threaten the economic or other values of surrounding lands. "Closed" routes would be designated where the biological, ecological, scenic or other values of the land require a high level of protection. The protection afforded by "closed" routes would strengthen and secure these important economic assets for the long-term.

No Action Alternative (D). Impacts would be the same as described above; the same routes designated "open" under Alternative A would be available for casual use under the No Action Alternative, the only difference being that they would not be designated "open" through this CDCA Plan Amendment. The routes closed under Alternative A would continue as unavailable for casual use under the No Action Alternative.

Special Recreation Management Area. Proposed Plan (Alternative B), Alternatives A and C. Designation of the Meccacopia Special Recreation Management Area (SRMA) would result in finite investment by BLM for the development of a detailed Recreation Area Management Plan, which establishes site-specific management directives and prescriptions for the SRMA. Greater, on-going managerial investment by BLM would also be required for supervision and enforcement of recreational restrictions, possible planning and construction of on-site management facilities, and related items. Designation of the SRMA would not preclude public use of the SRMA, but such uses would be restricted to those that are compatible with established management prescriptions.

No Action Alternative (D). This alternative would result in no SMRAs being designated at this time, with current management continuing based on existing uses and designations. Therefore, there would be no change in socio-economic effects from maintenance of the status quo.

Stopping, Parking and Vehicle Camping. Proposed Plan (Alternatives A and B), Alternatives C and No Action (D). The economic effects of restricting the zone alongside roads for stopping, parking, and vehicle camping would be indirect, yet positive. Such restrictions would enhance the long-term protection of valuable and finite natural resource areas with high biological, ecological, scenic and other values. In this regard, it would contribute to the overall economic health of these sensitive areas and the region's growing eco-tourism/ nature tourism industry.

Peninsular Ranges Bighorn Sheep Management Strategy. <u>Proposed Plan</u> (Alternative B), Alternatives A, C and No Action (D). Any limitations on recreational trail

use of the public lands will have an impact on the generally unlimited casual use that residents and visitors to the Coachella Valley have historically enjoyed. The extent of these limitations would be addressed through the Coachella Valley Multiple Species Habitat Conservation Plan being developed in coordination with interested members of the public, local jurisdictions, U.S. Fish and Wildlife Service, and California Department of Fish and Game. The plan would enhance the long-term recovery of the Peninsular bighorn sheep, which is an important component of the regional ecosystem, which is in turn an integral part of the overall regional economy.

Hiking, Biking and Equestrian Trails. Proposed Plan (Alternatives A, B and C). The economic implications of restricting trail use on public lands cannot be determined until such restrictions are identified. These will be identified through the Trails Management Plan element of the Coachella Valley Multiple Species Habitat Conservation Plan.

<u>No Action Alternative (D)</u>. The generally unlimited casual use of trails in the Coachella Valley could affect recovery of the Peninsular bighorn sheep, which is an important component of the regional ecosystem, which is in turn an integral part of the overall regional economy.